



II. Project Abstract

Briefly (500 words maximum) describe the proposed project clearly and concisely using the space provided.

The Vigo County School Corporation (VCSC) proposes a Learning Technology Program to improve mathematics classroom instruction and student learning through the use of technology. The VCSC will partner with Rose-Hulman Institute of Technology to improve the Indiana Math Standards mastery level and career preparation of at-risk students at Chauncey Rose Middle School, Sarah Scott Middle School, and West Vigo Middle School. Two area private schools, Holy Cross and Saint Patrick, will also participate. Student outcomes will include:

Goal One: At-risk middle school students will improve math performance on state standards.

- The percentage of overall students meeting state standards in math on ISTEP+ will increase by 3%.
- The percentage of students in free/reduced subgroups meeting standards in math will increase by 3%.
- The percentage of students in special education meeting standards in math will increase by 3%.
- The percentage of students meeting state standards on the Algebra 1 ECA Exam will increase by 3%.

Goal Two: At-risk middle school students will become engaged and motivated through use of technology.

- The use of technology will motivate and engage middle school students.

The VCSC will leverage its current strong partnership with Rose-Hulman Institute of Technology to provide mathematics teachers with 21st Century digital learning tools in meeting the state academic standards. A Rose-Hulman specialist will utilize PRISM to provide mathematics teachers with a library of over 2,500 online teaching resources (e.g. simulations, scientific visualizations, virtual labs, collaborative skills builders, process modelers, serious gaming, access to live data) that mirror the digital tools available in the modern workplace. Mathematics teachers will access a full-featured, online learning environment (Moodle) that provides course management tools for tracking student participation, homework/quizzes, and grades and supports exciting new ways to engage students beyond traditional “talk and chalk” delivery methods. VCSC teachers will also be provided opportunities to create and post lessons they collaborate on using the technology tools and professional development knowledge gained through this partnership. In addition, graphing calculators and student response systems will allow these teachers opportunities to peak student interest and improve student attention.

The VCSC will also leverage an instructional coach who will model active and hands-on lessons to engage at-risk students alongside mathematics teachers with the three schools. This coach will have a keen knowledge of state math indicators and of typical student difficulties with mastering those indicators.

Quantitative and qualitative data will document progress. A committee of district administrators and building administrators, along with school improvement teams at the three schools, will monitor achievement of the student learning outcomes. Tracking key errors from the various formative and summative assessments will provide the necessary data for remediation focus.